

# MIKE H. LIU

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## EDUCATION

**University of Illinois Urbana-Champaign – Champaign, IL**  
B.S. Computer Science

August 2015 – May 2018  
GPA: 3.76/4.00

**Medical College of Wisconsin – Milwaukee, WI**  
M.D. Medicine

August 2010 – March 2013  
(Withdrew)

**Johns Hopkins University – Baltimore, MD**  
M.S. Cellular and Molecular Biology, B.A. Biology

August 2004 – May 2009  
GPA: 3.73/4.00

## WORK EXPERIENCE

**Microsoft – Redmond, WA**

May 2017 – August 2017

*Software Development Engineer Intern – Windows Servicing and Delivery Group*

- Enhanced capabilities for Update Compliance (UC) solution built on Operations Management Suite (OMS) platform.
- Developed in C# proof-of-concept web service to efficiently retrieve Microsoft Graph API user/device active directory data.
- Sanitized JSON data for API ingestion into OMS logs streams to identify specific device organization roles with their UC data snapshots to enrich reporting for IT Administrators in Window 10 update status monitoring/deployment planning.
- Re-engineered UC TypeScript solution query generation and data parsing functions for adaption to new query capabilities of OMS Platform Kusto Query Language. Effort allowed for anticipated completion of UC solution migration well before release deadline.

**Intelligent Medical Objects – Champaign, IL**

May 2016 – May 2017

*SQL Developer/Mapping Analyst Intern – Clinical Terminology Mapping Team*

- Improved data representation of healthcare terminology to reimbursement codes in aiding clinicians' documentation experience.
- Created 60+ ad-hoc Oracle SQL reports to help team leads organize over 9,000 proprietary concepts by specific quality assurance issues in IMO clinical content to ensure compliance with best HIM professional editorial guidelines.
- Designed pilot user interface, corresponding queries, and backend table update stored procedure on Confluence Wiki that enables customizable data filtering in Oracle SQL for 11+ team productivity metrics reports to improve team efficiency.

## SKILLS

- C++, C, C#, SQL, Python, Java, HTML/CSS, JavaScript, TypeScript, Confluence

## RELEVANT COURSEWORK

- Algorithms and Models of Computation
- Database Systems
- Data Structures
- Systems Programming
- The Art and Science of Web Programming
- Artificial Intelligence
- Bioinformatics
- Text Information Systems

## PROJECTS AND ACTIVITIES

**Abstract Language Integrated Query (ALIQ)**

July 2017 – Present

- Contributor to open-source .NET DLL that enables database query logic agnostic of backend to be written in standard C# syntax.
- Implemented library file handler functionality to read/write table data into null-separated variable files for persistent storage.
- Developed unit tests for business logic demonstration using both C# native variables and converted web API JSON data.

**Minesweeper 2.0**

November 2016

- Personally coded a game in Java utilizing Javax.Swing library to explore and further build on classic Windows game.
- Utilized principles such as Breadth-First Search to implement classical functionalities like recursive cascade tile unveiling.
- Implemented new custom functionality for stochastic mine placement, user interface guidance for custom mine setting parameters, and scoring algorithm depending on game difficulty and time taken for completion.

**Intelligent Medical Objects Peer Mentor**

May 2016 – October 2016

- Mentored co-worker on her medical school application essays to best advance her candidacy.
- Conducted mock interviews and provided feedback on presentation to promote co-worker's interest in STEM, and our collaboration resulted in my co-worker attaining admission to a medical school of her choice.

## HONORS AND AWARDS

- Microsoft Tuition Merit Scholarship
- Tau Beta Pi Engineering Honor Society